

CLAIMS:

1. An animal feeder comprising:

a hopper for containing a feed material to be dispensed to an animal for feeding therefrom;

5 a receptacle for receiving the feed from the hopper from which the animal can take the feed;

an opening through which the feed passes so that the amount of feed discharged from the hopper to the receptacle is controlled by a width of the opening;

10 and an adjustment linkage for operating adjustment movement of the opening, the linkage including:

a manually adjustable lever mounted for pivotal movement about a pivot axis;

15 a link attached to the lever and to an element of the opening such that pivotal movement of the lever causes longitudinal movement of the link to effect adjustment of the opening;

a plate defining a surface over which the lever moves, the surface defining an arcuate portion lying on an arc of a circle surrounding the pivot axis of the lever;

20 the arcuate portion of the surface being serrated to define an arcuate row of saw teeth;

the lever having a lever edge which is also serrated with a row of saw teeth shaped to mesh with the saw teeth of the arcuate portion;

the lever being movable from a meshing position to a non-

meshing position in which the lever is free to move around the pivot axis to move the lever and the teeth thereof along the arcuate row of saw teeth to adjust the position of the link.

2. The feeder according to Claim 1 wherein the plate lies in a radial plane of the pivot axis and the arcuate row of teeth are located on an edge of the plate.

3. The feeder according to Claim 2 wherein the edge of the plate is an outer edge facing radially outwardly of the axis.

4. The feeder according to Claim 2 wherein the lever is formed by a flat of sheet material which lies in a plane parallel to and slides over the plate and wherein the lever includes a portion thereof which is bent out of a plane of the lever into the plane of the plate and carries the row of saw teeth of the lever on an edge thereof.

5. The feeder according to Claim 4 wherein the lever is movable in a direction axial of the pivot axis to move the row of teeth thereof axially away from the plate.

6. The feeder according to Claim 4 wherein the row of teeth on the lever face radially inwardly toward the pivot axis.

7. The feeder according to Claim 4 wherein the lever has a hole therein exposing a portion of the plate and markings thereon adjacent the row of saw teeth thereon.

8. The feeder according to Claim 1 wherein the lever is pivotally mounted on the plate.

9. The feeder according to Claim 1 wherein the link is connected to the lever by a pin which is slidable in a slot in the plate.

10. The feeder according to Claim 9 wherein the pin carries a spring which biases the lever into engagement with the plate into said meshing position and
5 which is compressible to allow movement of the lever to the non-meshing position.

11. The feeder according to Claim 1 wherein the plate is mounted on an end wall of the hopper parallel to and spaced from the end wall.

12. The feeder according to Claim 11 wherein the link comprises a strap located between the plate and the end wall.

10 13. The feeder according to Claim 1 wherein there is provided a trough into which the feed can fall and wherein the receptacle comprises a shelf mounted above the trough arranged so that the animal can take feed from the shelf or can move the feed from the shelf to the trough.

14. The feeder according to Claim 13 wherein the link is connected
15 to the shelf for adjustment of the height thereof relative to a bottom edge of the hopper defining the opening therebetween.

15. An animal feeder comprising:

a hopper for containing a feed material to be dispensed to an animal for feeding therefrom;

20 a trough into which the feed can fall;

a shelf mounted above the trough arranged so that the animal can take feed from the shelf or can move the feed from the shelf to the trough;

the shelf being mounted so as to define an opening relative to a bottom

edge of the hopper through which the feed passes;

the height of the shelf being adjustable relative to the bottom edge of the hopper to adjust the opening so that the amount of feed discharged from the hopper to the receptacle is controlled by a width of the opening;

5 and an adjustment linkage for operating adjustment movement of the shelf, the linkage including:

a manually adjustable lever mounted for pivotal movement about a pivot axis;

10 a link attached to the lever and to the shelf such that pivotal movement of the lever causes longitudinal movement of the link to effect adjustment of the height of the shelf;

a plate defining a surface over which the lever moves, the surface defining an arcuate portion lying on an arc of a circle surrounding the pivot axis of the lever;

15 the arcuate portion of the surface being serrated to define an arcuate row of saw teeth;

the lever having a lever edge which is also serrated with a row of saw teeth shaped to mesh with the saw teeth of the arcuate portion;

20 the lever being movable from a meshing position to a non-meshing position in which the lever is free to move around the pivot axis to move the lever and the teeth thereof along the arcuate row of saw teeth to adjust the position of the link.

16. An animal feeder comprising:

a hopper for containing a feed material to be dispensed to an animal for feeding therefrom;

a receptacle for receiving the feed from the hopper from which the animal can take the feed;

5 an opening through which the feed passes so that the amount of feed discharged from the hopper to the receptacle is controlled by a width of the opening;

and an adjustment linkage for operating adjustment movement of the opening, the linkage including:

a manually adjustable lever mounted for pivotal movement
10 about a pivot axis;

a link attached to the lever and to an element of the opening such that pivotal movement of the lever causes longitudinal movement of the link to effect adjustment of the opening;

a plate mounted on an end wall of the hopper parallel thereto
15 and spaced therefrom and defining a surface over which the lever moves, the plate defining an arcuate edge lying on an arc of a circle surrounding the pivot axis of the lever and facing outwardly of the axis;

the arcuate edge of the surface being serrated to define an arcuate row of saw teeth;

20 the lever being formed by a flat of sheet material which lies in a plane parallel to and slides over the plate;

the lever including a portion thereof which is bent out of a plane of the lever into the plane of the plate;

the portion of the lever having a lever edge facing radially inwardly toward the axis which is also serrated with a row of saw teeth shaped to mesh with the saw teeth of the arcuate portion;

the portion of the lever being movable in a direction axially of the axis away from the plate from a meshing position to a non-meshing position in which the lever is free to move around the pivot axis to move the lever and the teeth thereof along the arcuate row of saw teeth to adjust the position of the link.

17. The feeder according to Claim 16 wherein the lever has a hole therein exposing a portion of the plate and markings thereon adjacent the row of saw teeth thereon.

18. The feeder according to Claim 16 wherein the lever is pivotally mounted on the plate.

19. The feeder according to Claim 16 wherein the link is connected to the lever by a pin which is slidable in a slot in the plate.

20. The feeder according to Claim 19 wherein the pin carries a spring which biases the lever into engagement with the plate into said meshing position and which is compressible to allow movement of the lever to the non-meshing position.